

therein. ~~The invention further relates to *de novo* DNA cytosine methyltransferase promoter sequences of mouse Dnmt3a2 (plasmid P2-luc), and human DNMT3A2 (plasmid P2-luc-human) deposited with the American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209, USA, on \_\_\_\_\_, and assigned ATCC Deposit Nos. \_\_\_\_\_ and \_\_\_\_\_.~~

[0079] The nucleotide sequence of the human *DNMT3B* cDNA identified in SEQ ID NO:4 is available in a clone (ATCC Deposit No. 326637) independently deposited by the I.M.A.G.E. Consortium. The invention relates to the *de novo* DNA cytosine methyltransferase polypeptide encoded therein.

[0080] Clones containing mouse *Dnmt3a* and *Dnmt3b* cDNAs were deposited with the American Type Culture Collection (ATCC), 10801 University Boulevard, Manassas, Virginia 20110-2209, USA, on June 16, 1998, and assigned ATCC Deposit Nos. 209933 and 209934, respectively. The human *DNMT3A* cDNA was deposited with the ATCC on July 10, 1998, and assigned ATCC Deposit No. 98809. Clones containing mouse *Dnmt3a2* and human *DNMT3A2* were deposited with the American Type Culture Collection (ATCC) on August 23, 2002 and assigned ATCC deposit No. PTA-4611 and PTA-4610, respectively.

[0081] While the ATCC deposits are believed to contain the *de novo* DNA cytosine methyltransferase cDNA sequences shown in SEQ ID NOs:1, 2, 3, 4, 83 and 84, the nucleotide sequences of the polynucleotide contained in the deposited material, as well as the amino acid sequence of the polypeptide encoded thereby, are controlling in the event of any conflict with any description of sequences herein.

[0082] The deposits for mouse *Dnmt3a*, *Dnmt3a2* and *Dnmt3b* cDNAs and the human *DNMT3A* and *DNMT3A2* cDNA were made under the terms of the Budapest Treaty on the international recognition of the deposit of micro-organisms for purposes of patent procedure. The deposits are provided merely as a convenience for those of skill in the art and are not an admission that a deposit is required for enablement, such as that required under 35 U.S.C. § 112.